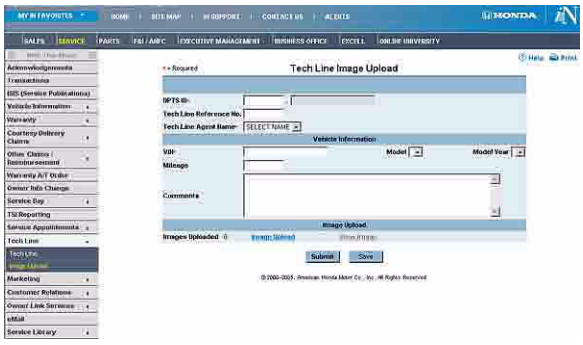
HONDA ServiceNews March 2005

Use the *i*N to Send Your Digital Images to Tech Line

It's said a picture is worth a thousand words, and those words certainly ring true when you're trying to explain a complex problem to a Tech Line Specialist over the phone. If you can show the specialist what you're talking about, not only does it save you time, but it lets the specialist "see" your problem so he can give you a better repair recommendation.

Good news! You can now upload digital images on the *i*N and send them straight to Tech Line. Here's how:

1. From the *i*N main menu, click on **SERVICE**.
2. Click on **Tech Line**.
3. Click on **Image Upload**.
4. On the **Tech Line Image Upload** screen, fill in these fields:
   - **DPTS ID** - Enter your DPTS number here.
   - **Tech Line Reference No.** - Enter the seven-digit Tech Line reference number here.
   - **Tech Line Agent Name** - Scroll down the list, and click on the name of the Tech Line Specialist (Agent) you're dealing with.
   - **VIN** - enter the VIN of the vehicle you're working on.
   - **Mileage** - Enter the mileage shown on the odometer.
   - **Comments** - Enter any relevant comments you might have.



5. Click on **Image Upload**.
6. On the **Image Upload** screen, click on **Browse** to select the image you want to send to Tech Line.
7. Click on **Open**.
8. Click on **Preview**. If everything looks OK, then click on **Upload**.
9. Repeat steps 6 thru 8 to upload more images. When you're done, close the screen. On the **Tech Line Image Upload screen**, click on **Submit** to send your images to Tech Line.

Replace VTEC Oil Pressure Switch for DTC P2646, P2647

NOTE: This article applies to '03–05 Accord L4s, '03–05 Elements, and '02–05 CR-Vs.

Got a vehicle in your shop with either of these DTCs?

- DTC P2646 (VTEC oil pressure switch circuit low voltage)
- DTC P2647 (VTEC oil pressure switch circuit high voltage)

Replacing the VTEC oil pressure switch (P/N 37250-PNE-G01, H/C 6737217) usually fixes the problem. If it doesn't, then press on with normal troubleshooting.

S/M Fix: VSA DTC 28, '05 CR-V

Seems the 2005 CR-V Service Manual is missing troubleshooting for VSA DTC 28 (longitudinal acceleration sensor). Until we can fix the S/M, use the troubleshooting for VSA DTC 26 [lateral acceleration sensor (inside of the sensor cluster)] on page 19-68. But to use this procedure for VSA DTC 28, change step 3 to read: Test-drive the vehicle around corners while braking.

TIME-SERT® Thread Repair Kits: The Solution for Stripped Head Bolt or Aluminum Oil Pan Drain Plug Threads

Got a vehicle with stripped head bolt threads in the engine block or stripped drain plug threads in an aluminum oil pan? The Honda Tool and Equipment Program has some cool tools to help you out.

For those nasty stripped head bolt threads, there are two thread repair kits available:

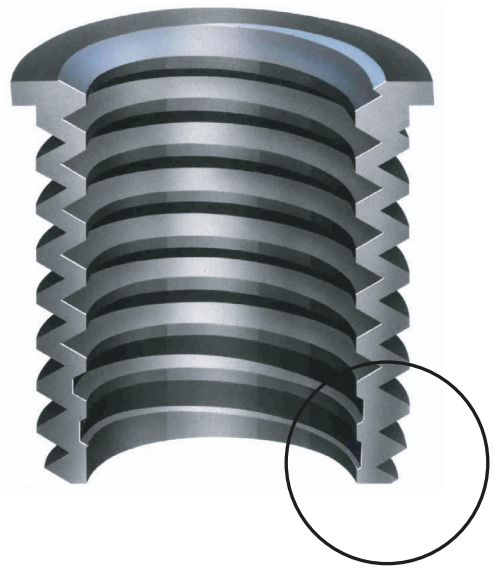
- **Head Bolt M11x1.5 Thread Repair Kit (P/N TFC7111):** This kit services '03–05 Accord L4s, '02–05 CR-Vs, '03–05 Elements, and '02–05 Civic Sis.
- **Head Bolt M12x1.5 Thread Repair Kit (P/N TFC7220):** This kit services '99–02 Accord V6s, '03–05 Accord V6s, '99–04 Odysseys, '05 Odysseys, and '03–05 Pilots.

For stripped drain plug threads in an aluminum oil pan, the **Drain Plug Repair Kit M14x1.5 (P/N TFC1415C)** is the ticket. This kit services '98–02 Accords, '03–05 Accords, '96–00 Civics, '01–05 Civics, '04–05 Elements, '99–04 Odysseys, '05 Odysseys, and '03–05 Pilots.

Each kit includes all the stuff you need to install TIME-SERT® inserts. All you need to add is a tap wrench and some cutting fluid. A kit typically includes a drill fixture, drill bushing, drill bit, alignment pin, tap, insert driver, and a supply of inserts. You also get some LocTite and driver oil.

If you're not already familiar with TIME-SERT® inserts, here are a few facts about them:

- It's a threaded, solid bushing insert made by the Time Fastener Company (they're in Reno, Nevada) for repairing stripped or damaged threads. It's easy to install and allows for full load use of the tapped hole, ensuring protection against stress and vibration.



- It's thin-walled so you can install it in tight-fitting areas.
- It's self-positioning. There's a flange on the top of the insert that ensures positive placement and keeps the insert from winding down into the newly repaired hole.
- It's self-locking. When you install the insert, the bottom internal threads are cold-rolled to expand the mating external threads into the base material, locking the insert in place.

To order any of these kits, call the Honda Tool and Equipment Program at **888-424-6857**.

Update Kit Coming for ATF Cooler Cleaner

By now, you're all probably familiar with the ATF Cooler Cleaner (P/N GHTTTCF6H). Shortly, you'll be getting an update kit (free of charge from the manufacturer) that kicks its performance up a notch. Here's what you'll get in this kit:

- ***Dipstick.*** There's no easy way to measure the ATF level in the tank. Keeping the right ATF level is crucial though for effective cooler cleaner operation. If you overfill the tank, ATF will blow out the filler/breather tube. If the ATF level drops too low, the tank heater shuts off as a safety precaution. The dipstick makes checking the ATF level a snap. Just insert the dipstick all the way into the filler neck opening, pull it out, and read what's on the stick.

- ***Improved tank float***. The white tank float gets replaced with a new brown float. This new float allows for a lower ATF level in the tank before the tank heater shuts off. This stretches the time between tank refillings.
- ***Worm-style clamps***. The spring-style clamps used on the ATF cooler lines are made to hold the cooler lines to the ATF cooler under normal operating conditions. The cooler cleaner uses high pressure (**100 psi**) to do its job. With the pump motor running, the spring-style clamps can walk off or disconnect, causing a major ATF spill. The spring-style clamps get replaced with high-quality worm-style clamps. These clamps securely hold the cooler lines in place.

Reman A/Ts *Aren't* Interchangeable

When you get a reman A/T, we can't emphasize enough how important it is to install it in the vehicle you ordered it for. *Never* interchange reman A/Ts. Here's why:

- The VIN and the A/T serial number are stored in a database that may be used for a recall or product update. If you install the reman A/T in another vehicle, this database becomes worthless.
- A/Ts may have different gear ratios, clutch capacities, or both, for different trim levels, even though they're for the same model and year of vehicle.
- A/Ts for navigation system- equipped vehicles may have different sensors than A/Ts for vehicles without the navigation system.
- A/Ts are shipped for a specific vehicle. If the VIN doesn't match the A/T serial number, the warranty claim may get rejected.

Look for the VIN in either the core return envelope or on the outside of the shipping container.

Accord Hybrid Has New Type A/C Compressor

The '05 Accord Hybrid comes with a new type of A/C compressor that lets the A/C run while the vehicle is in Auto Idle Stop. It's actually two compressors in a single case. One compressor is the conventional type driven from the crankshaft by the drive belt. The other compressor is driven by a high-voltage, three-phase electric motor.

Since the electric motor is inside the compressor case and it's in contact with the compressor oil, make sure you use *only* Sanden SE-10Y (P/N 38899-RCJ-A01, H/C 7964885). This compressor oil has unique electrical insulating qualities that protect you from dangerous electrical shock by the electric motor.

If you put in the wrong compressor oil, you'll also contaminate the A/C system. Just how bad the damage gets depends on whether you run the A/C afterwards. If you don't run the A/C, you'll need to replace only the compressor. If you run the A/C, you'll need to replace not only the compressor, but also the condenser, the evaporator, and all the lines.

And here's another important thing to remember: Once you open the can of compressor oil, you need to use all of its contents right then. You can't store an open can for later use.

Low Tire Pressure Indicator On; DTCs 11, 13, 15, or 17

NOTE: This article applies to '05 Odysseys, '05 Pilots, and '06 Ridgelines.

Cold weather can cause the low tire pressure indicator on the instrument panel to come on and the tire pressure monitoring system (TPMS) control unit to set one or more of these TPMS DTCs:

- TPMS DTC 11 (right-front low tire pressure)
- TPMS DTC 13 (left-front low tire pressure)
- TPMS DTC 15 (right-rear low tire pressure)
- TPMS DTC 17 (left-rear low tire pressure)

There are several reasons why this can happen. One reason is that tire pressure is affected by temperature. A **10°F** change in tire temperature changes the tire pressure by **1 psi**. The low tire pressure indicator comes on when the tire pressure falls below **25%** of the recommended tire pressure. You should check the tire pressure when the tires are cold. Another reason is that tire pressure gauges have a bad reputation when it comes to accuracy. Make it a point to calibrate your tire pressure gauge often.

Here's a typical scenario to illustrate just what we're talking about. The tire temperature was warm from driving (**90°F**) when you checked the tire pressure and set it to the recommended value. Your customer then parked the vehicle outside and the outside temperature and the tire temperature dropped down to **10°F**. This **80°F** drop in tire temperature causes an **8 psi** drop in tire pressure. If the tire pressure gauge was off by **+ 1 psi**, the **9 psi** change in tire pressure will cause the low tire pressure indicator to come on and the TPMS control unit to set a TPMS DTC.

Radio Volume Drops After Changing Stations

Got an '05 Accord owner griping that the radio volume sometimes drops after selecting a different FM radio station? Your customer has every right to sound off. There's a glitch in the audio unit that's causing this. To fix this problem, replace the audio unit. Reman audio units have been countermeasured.

Warranty Audio Ordering System Is Here

The current No Trouble Found (NTF) rate for '05 Odyssey and '06 Ridgeline audio units is between 30% and 40%. To improve customer satisfaction and to cut down on warranty expense, Tech Line and the Parts Division have put together a Warranty Audio Ordering System.

To order a replacement audio unit that's on the Warranty Audio Ordering System, refer to S/B 04-080, *Odyssey: Audio Unit Diagnosis*, or to S/B 05-005, *Ridgeline: Audio Unit Diagnosis*. Before you call Tech Line, make sure your have this info handy:

- **Complaint details.** What's the complaint? Can you duplicate the problem? You might need to call your customer and have him or her demonstrate the problem for you. Where and when does the problem happen? This info helps the audio unit vendor duplicate the problem and to fix it in production. Can you compare this problem to a like vehicle? If a like vehicle has the same symptoms, this might be a characteristic of that year and model.
- **Installed aftermarket equipment**. Is there any aftermarket stuff installed? Look for items such as LoJack, cell phone 12-volt adapters, radar detectors, window tint, etc.
- **Your diagnosis and result.** Make sure you include what service publications you used in your diagnosis (pages from the appropriate S/M, applicable *ServiceNews* articles, etc.).
- **Urgency.** When do you need the replacement unit? Overnight? 2nd day? If you need it pronto, Tech Line can request an emergency overnight shipment.

Try to have your customer's vehicle available until the audio unit specialist has ordered you the replacement audio unit. This is just in case the audio unit specialist needs you to do some more diagnostic work.

Windshield Wiper Blade Care and Replacement

A buildup of road film, oil, or grease on the windshield or the wiper blades can cause the wiper blades to smear, streak, or chatter when being used. If your customers complain of this problem, and their wiper blades are less than **6 months** old, try doing this before you replace the blades:

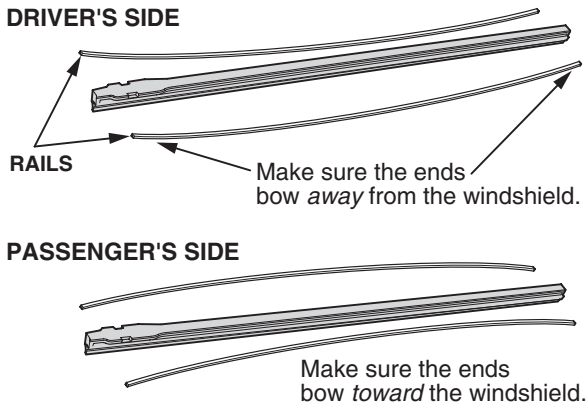
- Use Glass Cleaner (P/N 08732-0050, H/C 7646573) or equivalent, to thoroughly clean the windshield. Make sure you clean it well enough so that water slides off of it, not just beads up.
- Use Windshield Washer Concentrate Cleaner & Antifreeze (P/N 08798-9025, H/C 6864045) straight from the bottle on a soft cloth to clean the wiper blades. This stuff contains a wetting agent that conditions the blade rubber.

If the wiper blades still smear, streak, or chatter after you've cleaned the windshield and the blades, then blade replacement is in order. When you remove the old blade from its holder, make sure you grab the locking end of the blade on its top and bottom (use your thumb and index finger for this). Tug on the blade until it releases, then slide it off the holder. Don't grab the locking end from the sides. The metal rails could come loose and you could also wind up with a nasty cut.

If the new blades don't have rails, make sure you install the rails from the old blades on the new blades like this:

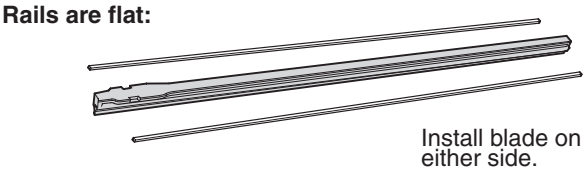
If the old rails are curved:

- Install them on the new driver's-side wiper blade with the ends bowing *away* from the windshield. This makes the blade press harder against the middle of the windshield, providing a clear center of vision for the driver.
- Install them on the new passenger's side wiper blade with the ends bowing *toward* the windshield. This makes the blade press harder against the edges of the windshield to clear off any water at the upper and lower ends of each wiper pass.


DRIVER'S SIDE
RAILS
Make sure the ends bow *away* from the windshield.
PASSENGER'S SIDE
Make sure the ends bow *toward* the windshield.

If the old rails lie flat:

Install them on either new wiper blade.



If one of the new blades is shorter than the other (this is common on many vehicles), just install the shorter blade on the driver's side.

Slide the new blade into the holder, and push from behind with your thumb until you feel the tabs snap into place. Make sure the blade is locked in place before you reinstall the blade assembly. If it's not, the blade could come off during use and the blade assembly could scratch the windshield.

Mute Speakers? Check the Speaker Wire Terminals

Got an ’05 Accord in your shop with mute speakers? Open the trunk, and check the speaker wire terminals. If a large object like a suitcase whacks the speaker wires, it can bend the terminals and cause a short circuit. This short overloads the audio unit output circuit, and the audio unit stops sending out the audio signal to some or all of the speakers. Usually, the sound comes back after you fix the short. But if it doesn’t, then press on with normal troubleshooting.

Seat Belt Tongue Stopper Button Position Is OK

We’ve gotten a number of reports of dealers replacing or relocating third row seat belt tongue stopper buttons in ’03–05 Pilots. Vehicle owners have complained that the passenger-side tongue stopper button is either missing or it’s positioned differently than the one on the driver’s side.

Truth is, the tongue stopper buttons are positioned just where they should be. The passenger-side tongue stopper button is positioned at a different height to allow clearance between the sideliner and the seat-back. Let your customers know there’s no problem with the seat belts.

Third row outer seat belt tongue stopper buttons are at different heights. This is normal.

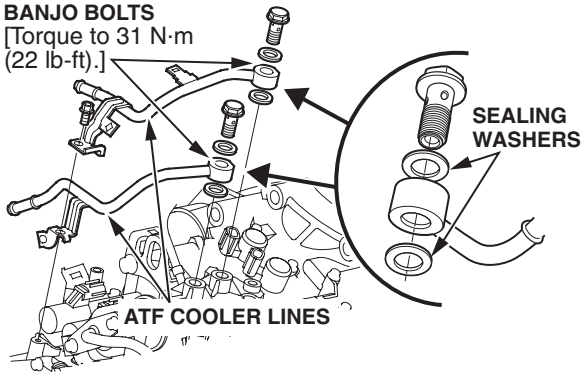
Fixing A/T Banjo Bolt Leaks

Got ATF leaking from any of the A/T banjo bolts? The first thing you need to do is replace the sealing washers. Next, start threading the banjo and line bracket bolts in their holes. Finally, torque the banjo bolt to **31 Nm (22 lb-ft)** and the line bracket bolt to **9.8 Nm (7.2 lb-ft.)**.

NOTE: The banjo bolt torque spec we’re recommending is slightly higher than what’s listed in the S/M. This is intentional.

If you torque just the banjo bolt, you won’t really fix the leak. ATF leaks at the banjo bolt stem from the line bracket getting tightened before the banjo bolt. This can misalign the banjo joint, causing the banjo bolt sealing washers not to contact their mating surfaces evenly. Once the sealing washers have been used, you must replace them.

PILOT SHOWN



S/M Fix: Rear Brake Disc Thickness, ’03–05 Accord

The standard rear brake disc thickness called out on pages 2-15 and 19-23 of the 2003–05 Accord S/M is wrong. The correct standard thickness should be **8.9–9.1 mm (0.35–0.36 in.)**. Mark up your copies of the S/M to reflect this change.

Clearing DTCs in Generic OBD II Mode or With a Generic Scan Tool

Honda vehicles, like all vehicles certified for sale in the U.S. since 1996, must comply with a common data communication protocol known as On-Board Diagnostics II (OBD II). Vehicle manufacturers can have their own communication system as long as they comply with the OBD II requirements.

American Honda has supplied two different scan tools to Honda dealerships. The first to come out was the PGM Tester. It services all '92–03 Honda vehicles but it's no longer supported by American Honda. The latest evolution is the Honda Diagnostic System (HDS). It's the PGM Tester's replacement and it services all current Honda models as well as the older ones. The HDS, like the earlier PGM Tester, features a Generic OBD II mode. In this mode, the HDS works the same as any aftermarket scan tool. A Generic OBD II scan tool must be able to display DTCs and to clear them.

If you try to clear DTCs on a Honda vehicle using the HDS or PGM Tester in Generic OBD II mode or a generic scan tool, you might not get the results you'd expect. That's because Honda vehicles actually use three different kinds of clear commands: DTC CLEAR, ECM/PCM RESET, and more recently, CKP PATTERN CLEAR. If you're using the HDS or PGM Tester in Honda System mode, the level of clearance varies. If you're using the HDS or PGM Tester in Generic OBD II mode or a generic scan tool, there's just one clear command. It clears *all* learned values.

	DTC	Freeze Data	Readiness Codes	Idle Learn Data	CKP Pattern Data (V6 Models)
HDS or PGM Tester in Honda System Mode					
DTC CLEAR	X	X	X		
ECM/PCM RESET	X	X	X	X	
CKP PATTERN CLEAR*					X
HDS or PGM Tester in Generic OBD II Mode; Generic Scan Tool					
CLEAR	X	X	X	X	X

* This command is available only on the HDS.

Since all the learned values are cleared in Generic OBD II mode or with a generic scan tool, don't forget to do the idle learn procedure. And if you're working on a V6 model, don't forget to do the CKP pattern learn procedure, or you could wind up with a misfire DTC when there's really no problem. Refer to the appropriate S/M or ISIS for idle learn and CKP pattern learn procedures. If you're working on a '05 Accord Hybrid, you need to be really careful here. *Always* turn the ignition switch to LOCK (0) after clearing the DTCs. If you don't, and you start the engine right after clearing, you could damage the IMA battery.

Replacement Oil Jet Hoses Now Available

NOTE: This article applies to '03–04 Accord V6s, '02–04 Odysseys, and '03–04 Pilots with the A/T Oil Jet Kit (P/N 06250-PGH-305, H/C 7758931) installed.

In the October '04 issue of *ServiceNews*, we told you how to refill or top off an A/T that's got the A/T Oil Jet Kit installed (see the article "Replenishing ATF on Vehicles With A/T Oil Jet Kits." Something we need to add: Honda parts stock now carries replacement oil jet hoses. You no longer need to order the entire A/T Oil Jet Kit just to replace a damaged oil jet hose. Use this handy chart when ordering replacement oil jet hoses:

Model	Description	Part Number	Honda Code
'03–04 Accord V6	ATF Hose (125 mm)	25211-RDG-305	7984263
'02–04 Odyssey	ATF Hose (120 mm)	25211-PGH-305	7984255
'03–04 Pilot	ATF Hose (120 mm)	25211-PGH-305	7984255

AUTOMOTIVE Youth Educational Systems YES ®

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